Communication and Interpersonal Helping Skills: An Essential Component in Physiotherapy Education?

The rationale and content for an interdisciplinary communication and interpersonal helping skills programme taught to third year Physiotherapy students is described, noting in particular the need to integrate a general counselling model with specific interviewing and clinical skills required by Physiotherapists. A programme evaluation based on the participation of 97 students is described. Evaluation techniques included meetings of the independent evaluator with student representatives, and completion by students of several forms evaluating general and specific aspects of the programme.

Overall, the results were positive and supportive of the rationale and content of the programme. A pre- and post-test design was used to assess outcome in terms of student priorities, results of which are discussed with reference to the measuring instrument's focus on ratings of performance as distinct from specific behaviours. Directives for the future development of the programme are highlighted.

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Recognition of the need for interpersonal communication and helping skills instruction to be an integral part of the training of health professionals is evident in recent literature. Numerous articles testify to the significance of such courses in both medical education (Alroy, Ber and Kramer 1984, Quirk and Letendre 1986, Tanner and Silverman 1981, Wiltshire 1982) and education for allied health disciplines [for example, Optometry (Bennett 1982), Dentistry (Brown 1983, Eigenbrode 1983), Physiotherapy (Gartland 1984a, 1984b), and Speech Therapy (Volz 1978)]. The recognized need extends also to other professions, such as Architecture (Williams and Shaw 1982), Education, Agriculture, Engineering and Home Economics (Sollie and Scott 1983).

With respect to Physiotherapy, Gartland (1984b) reported that 80 per cent of the Canadian physical therapy school programmes offer systematic instruction in human relations development; formal communication skills instruction is seen to be closely related to the quality of health care, with interpersonal communication constituting 'one of the cornerstones of the art of the health professions' (p.31).

Many programmes designed to develop interpersonal helping skills in clinical practice are directed toward the conduct of the clinical interview and are conducted by health professionals; others, designed to teach counselling skills, are run by behavioural scientists. Few studies report programmes which involve participation of both health professionals and behavioural scientists. More generally, there appears to be a gradual recognition of the value of an interdisciplinary approach to the teaching of communication skills (Gorlin and Zucker 1983, Tanner and Silverman 1981, Williams and Shaw 1982, Wiltshire 1982) and of interdisciplinary education which fosters familiarization among health professionals about roles, tasks, and specialization across disciplines (Laatsch, Milson and Zimmer 1986).

In 1982, a programme entitled 'Communication and Interpersonal Helping Skills in Clinical Practice' was jointly developed by the Schools of Behavioural Sciences and Physiotherapy, Lincoln Institute of Health Sciences, Melbourne, Victoria. The programme has been the focus of ongoing evaluation since its inception, with a view to assessing its value and identifying the most effective methods for teaching it.

As an adjunct to the regular teaching commitments of Behavioural Science staff, the programme incorporated features such as visits to students on clinical Physiotherapy placements, and the meeting of staff from both disciplines

periodically to discuss and monitor the unit's progress. The ensuing advantages have appeared to include: cross-disciplinary stimulation, the opportunity to provide an applied focus in teaching the subject matter, and the provision of a variety of role models for students. Disadvantages pertain to economic and logistic considerations, which have provided stimulus for further evaluation, from a cost-benefits perspective.

Apart from the focus on interdisciplinary collaboration, the programme is designed to foster an educational environment that facilitates a more satisfying overall learning process by integrating personal and interpersonal issues with the clinical practice of Physiotherapy (Williams and Shaw 1982). Drawing from the literature (Tanner and Silverman 1981, Levin 1984), the subject utilizes a structured approach, which includes an emphasis on microskills training, visits to clinical settings, the use of simulated patients, videotaped practice and immediate feedback on skill performance, trigger films, role playing, serial counselling, and didactic sessions incorporating seminars, discussions, readings, and experiential exercises.

The aim of the present paper is to report the findings of the most recent programme evaluation, which was carried out by an independent evaluator (RW) in consultation with the two staff members directly involved in conducting the programme (CS and HS) and to acquaint members of the Physiotherapy profession with the approach being adopted. The aims of the evaluation were (a) to provide a description of how the programme was conducted and its outcomes, (b) to identify how students perceived the programme, (c) to assist in making an assessment of whether the cost associated with clinical visits was worthwhile in terms of the outcomes, and (d) to assist in making an assessment of whether the simulated patient programme was useful and whether it could be substituted for clinical visits.

Method

Evaluation Techniques

It was intended that a central element of the process of evaluation should be direct student involvement in the identification of concerns and in suggesting improvements. The data collection involved a 'triangulation' of methods. The following methods were used:

- Meetings with student representatives were held at the beginning, middle, and end of the programme.
- A 'programme evaluation sheet' provided general student feedback during the closing session.
- A student self-report rating of the videotaping session was completed.
- A 'Communication Skills in Clinical Practice' questionnaire, modified from that used by Tanner and Silverman (1981), was completed by students using a pre-posttest experimental design.
- A student self-report rating of the simulated patient interview session was completed.
- The independent evaluator observed two class sessions involving the use of simulated patients.
- Regular discussions were held among the teaching staff and the independent evaluator.

Description of Programme

The programme aims to provide opportunity, through theoretical, practical, and clinical components, for students to acquire knowledge, to examine attitudes, and to develop skills in the area of communication and interpersonal helping. The impact of psychological, social, and sexual factors on the practising professional are considered. The programme offers experiential learning in the small group context and in the clinical setting, and is restricted to third-year Physiotherapy students. The assessment is based on participation, attendance, and submission of a journal. Set readings and exercises are contained in a School 'Handbook of Readings'. A list of references and an extensive Bibliography are provided, including authors such as Alexander (1973), Anthony and Carkhuff (1976), Brammer (1985), Egan (1986), Gorlin and Zucker (1983), Hargreaves (1982), Northouse and Northouse (1985), Purtilo (1978), and Schultz (1983).

The cohort of 97 Year 3 Physiotherapy students was divided into eight groups for the purpose of teaching this programme, which consisted of 16 hours of classes and workshops, most sessions being of one and one-half hour duration. Five sessions were conducted before a four-week clinical placement block. Five further class sessions were held after students had completed their placements.

The content of the first five sessions included an introduction to basic helping skills (Egan, 1986) and a three-hour 'Human Sexuality' seminar, designed to increase comfort with discussion of attitudes and feelings related to sexual expression (Brower Meeks and Heit, 1982). Students were encouraged to set goals, monitor their performance on an on-going basis, and to adopt a problem-solving approach to interpersonal communication in clinical settings. By way of illustration, on-going goal-setting might include movement from the initial goal of 'keeping check of my voice tone', to 'being more relaxed in my posture', to 'being more empathic in my relationships', to 'being as confident and competent as possible with my physiotherapy technique'. Monitoring of goals was executed by a combination of student self-assessment, keeping a diary record, and participation in the regular class discussions on self-development.

Other features incorporated into the class sessions were the use of videotaping of students' performance for replay and feedback purposes and the use of simulated patients for students to practice interviewing skills. Simulated patients were drawn from the Institute's 'Simulated Patients Training Project' and included cases of physical disablement with associated psychological distress. One patient was a 29-year-

old female with multiple sclerosis, who presented with a variety of physical symptoms and psychological problems. Another patient was a 24-year-old man who was involved in a motorbike accident six months previously; having sustained multiple fractures to upper and lower limbs, his long period of hospitalization, rehabilitation, and slow recovery left him depressed and rejecting of physical therapy. Students in groups of six were given opportunity to interview/counsel the patient, after which feedback was given and received on a systematic basis.

During the four-week clinical placement blocks, the Behavioural Sciences staff made visits to approximately one-third of the student cohort in clinical settings. Of necessity, visits had to be restricted to those hospitals conveniently located to the Institute. During the five class sessions subsequent to the clinical placement, the opportunity for the focus to be directed to examining problems encountered by students during their clinical placement was provided, a problem-solving model being, thus, fully utilized. In addition, 11 hours of the 27 hour subject were designated for reading, viewing of films, maintaining a diary, and one-to-one student/staff meetings.

Results and Discussion

Student discussions with the evaluator were marked by a noticeable change in attitudes from initial meetings to those held later in the year and led to the conclusion that the subject was well received. Initially, the relevance of the subject was not questioned greatly, although there was some scepticism as to whether it could be effective. Students remarked that it was quite a change from the more academic subjects in the Physiotherapy course and that, consequently, there was a tendency to give it low priority.

The main comments at subsequent meetings were that the expectations of many students had changed and that they had come to regard the subject as relevant and worthwhile. The relaxed, supportive atmosphere created by staff was much appreciated and this helped students to alleviate their personal levels of anxiety about relating to patients. The classes allowed students to talk about work and study problems and stress, and were thus a useful means of building mutual support. The simulated patient exercise was considered very valuable, with students requesting that it be repeated and extended. Many students reported finding the diary an aid to goal-setting and problem-solving. The videotaping and feedback were considered very helpful aspects of the programme.

The general student reaction to the subject is well summarized in the following comment made by a participant:

> This is the first time in two and a half years that I have felt this sure about actually wanting to be a Physiotherapist . . . this programme is extremely beneficial to students of the health professions and has made me more aware and hence a little bit more perceptive of, and about, the ways in which to approach people . . .

A detailed breakdown of student reaction to the various components of the subject was obtained from Evaluation Technique 2 (Table 1). The learning strategies rated by students as most effective in relation to both personal development and interpersonal com-

Table 1:
Student ratings of effectiveness of subject

Subject Objective	*Learning Strategy*	*Number of Responses*	*Effectiveness % (rounded)*			
			a High	*b Med.*	*c Low*	*a-c*
1. Personal development	classes	67	9	81	10	−1
	clinic work	69	42	54	4	+38
	handbook of readings	67	9	60	31	−22
	videotaping session	71	37	55	8	+29
	simulated patient session	71	37	53	10	+27
2. Interpersonal communication skills	classes	70	23	67	10	+13
	clinic work	70	51	44	5	+46
	handbook of readings	69	7	54	39	−32
	videotaping session	72	50	36	14	+36
	simulated patient session	70	49	41	10	+39
3. Knowledge of related theory and research	classes	69	26	64	10	+16
	clinic work	72	13	57	30	−17
	handbook of readings	69	25	62	13	+12
	videotaping session	70	16	51	33	−17
	simulated patient session	67	16	54	30	−14

munication skills were clinical work, videotaping sessions, and simulated patient sessions. The Handbook of Readings was rated as the least effective in these areas. In relation to developing a knowledge of theory and research, the classes and the Handbook of Readings were rated the most effecive and the clinic work and videotaping were rated least effective. The programme evaluation sheet also provided space for students to write comments. A very large majority of their comments were positive about the use of simulated patients, the videotaping sessions, and the programme in general. On the other hand, a majority of the comments made about the use of a student diary for assessment expressed reservations about how helpful it was. Additionally, a majority of the comments about the Handbook of Readings suggested they could be reduced or simplified. Nevertheless, overall it was the case that the various teaching methods combined to provide a balanced outcome in the attainment of subject objectives.

In addition to rating the effectiveness of the videotaping sessions on the programme evaluation sheet, students also completed self-rating reports on their videotaped performance. Students were moderately to highly positive about seeing themselves on videotape; they were very comfortable about receiving feedback; they thought that it was very helpful to see the videotape of other students, and they rated their increased awareness arising from peer and teacher feedback as moderate to high (Table 2). The evidence suggests that this was a well received and valuable learning experience for students and, indeed, there were a number of suggestions from students that there should be more of this sort of activity. These findings concur with previous research which has found videotaped feedback exercises a valuable educational device (Quirk and Letendre 1986, Scheidt, Lazoritz and Ebbeling 1986, Sollie and Scott 1983).

Students completed a questionnaire on Communication Skills in Clinical Practice at the beginning of the subject and again at the end of the subject. The questionnaire asked students to rate the importance of eight different types of activities which Physiotherapists could engage in while interviewing clients.

Unfortunately, there were certan measurement problems associated with this questionnaire. Due to timetabling and administrative problems, the number of students completing the questionnaire dropped from 97 pre-subject to 55 post-subject. In addition, the pre-subject administration of the questionnaire resulted in higher than anticipated concentrations of ratings at the top end of the scales, which suggests that a ceiling effect was operating. Consequently, in the post-subject administration there was little room for upward movement of ratings. It is also likely that movements between pre-subject and post-subject ratings might have been greater if the questionnaire had asked students to rate their level of confidence in undertaking the various behaviours listed. (Authors' Note: This proposition has been supported by the results subsequently obtained from a revised questionnaire administered to a group of Prosthetic and Orthotic students within a subject having very similar objectives.)

In the light of these measurement problems, the ratings of importance of interviewing activities need to be considered as indicative rather than necessarily accurately reflecting changes in the attitudes of students. The results indicate that both before and after the subject a majority of students thought that (a) putting clients at ease by showing empathy, active listening and concern for clients' needs, and (b) providing information clients want to know in language they understand, were extremely important skills in interviewing. Both before and after the subject, students thought that 'obtaining a complete medical history as quickly as possible' was the least important activity in interviewing. The results indicated that there was a marked increase

Table 2:
Student self-rating reports on videotaping session

Question	*Rating*							
	High						*Low*	
	1	*2*	*3*	*4*	*5*	*6*	*7*	*Mean*
How positively did you react to seeing yourself on tape? (N = 95)	5	24	27	19	18	0	1	3.3
How comfortable did you feel about receiving feedback? (N = 95)	36	31	17	6	3	0	2	2.2
How much did you learn about yourself from viewing the tape, that you had not previously been aware of? (N = 94)	11	10	39	21	9	1	3	3.3
How much did your awareness increase from peer and teacher feedback? (N = 94)	10	18	40	18	5	1	2	3.0
How helpful was it seeing the video tape of other students? (N = 90)	37	22	17	9	2	1	2	2.2
How confident do you feel now about using your interpersonal helping skills in clinics? (N = 89)	2	21	44	18	3	—	1	3.1

in the rated importance of 'having the therapist become aware of their own feelings as well as those of the client . . .' (Table 3). It is also possible that the movements between pre- and post-test responses might have been greater if the instrument had sought to describe actual student performance of desirable behaviours, rather than simply rating their importance.

As reported earlier, the use of simulated patients was rated very highly in terms of its effectiveness in developing interpersonal skills (Table 1). Over 60 per cent of the written comments by students on simulated patients were to the effect that there 'should be more'.

Approximately 75 per cent of students participated directly in a one-to-one interview with a simulated patient, while the remainder of the group observed. Students completed a self-rating form after the simulated patients interview and the results showed that most students gave ratings of medium to low for their level of 'comfort' during the interview and for the amount learnt about themselves from supervisor feedback and from patient feedback. Students thought it was very helpful to observe other students conducting interviews and to hear feedback from other students. In response to a question on how realistic simulated patients are, over 60 per cent of students gave the highest possible rating (Table 4).

Given the very positive student comments, the commitment of staff, and the evidence suggesting favourable learning outcomes, it was concluded that the use of simulated patients formed a valuable and integral part of the programme and that an expansion of the use of simulated patients within the programme was desirable.

While the usefulness of simulated patient sessions has been demonstrated, it was concluded that clinical visits should also remain integral to the subject, as both methods are of value to students (see Table 1).

Moreover, the clinical visits serve the functions of keeping the staff in touch with the clinical situation facing students and fostering teamwork between Behavioural Science staff and Physiotherapy staff. The importance of these functions is not to be underestimated. As Williams and Shaw (1982) noted, 'there is more to the learning experience than the provision of subject matter'. In similar vein, Eckenfels, Blacklow and Cotterer (1984) described 'the personal characteristics and time commitment' of student-advisers as of greater importance than their training discipline, and 'continuity of contact' between student and adviser as fostering the development of beneficial relationships.

Table 3:
Student rating of importance of interviewing skills

Item		*Ratings in percentages*						*Mean*	
	Test	*1*	*2*	*3*	*4*	*5*	*6*	*rating*	*N*
1. Putting client at ease by showing empathy and concern	Pre	—	—	2	8	31	59	4.5	97
	Post	—	—	—	15	29	56	4.4	55
2. Obtaining a medical history as quickly as possible	Pre	1	9	20	43	16	14	3.1	97
	Post	6	6	27	33	18	11	2.9	55
3. Ensuring client compliance wth physiotherapist's orders	Pre	—	—	4	18	39	39	4.2	97
	Post	—	—	2	16	56	24	4.0	55
4. Facilitating client's talking openly	Pre	—	7	9	21	37	26	3.6	97
	Post	—	—	7	27	46	15	3.6	55
5. Taking care of client's chief complaint	Pre	—	1	1	28	43	27	4.0	97
	Post	—	—	—	13	46	42	4.3	55
6. Being attentive to nonverbal cues	Pre	—	2	3	13	41	39	4.1	97
	Post	—	—	6	27	46	22	3.8	55
7. Providing information to clients in language they understand	Pre	—	—	1	7	39	53	4.4	97
	Post	—	2	2	4	33	60	4.4	55
8. Developing awareness of own feelings and those of clients	Pre	—	5	11	37	29	18	3.4	97
	Post	—	2	6	27	35	31	3.9	55

Note: Rating Scale: 1 = unimportant; 6 = extremely important.

Conclusion

In an article which discussed the relevance of nonverbal skills in Physiotherapy, Hargreaves (1982) argued that 'by far the most important way to teach students empathy and understanding is in the *vivo* situation' (p. 22).

The approach described in the present paper incorporates the *in vivo* learning situation, on the basis of support derived from evaluations over a period of years. The evaluation reported here clearly demonstrates that students rated *in vivo* learning, video rehearsal, and simulated patient work as the most effective strategies for en-

Table 4:
Student self-rating report on simulated patient interview

Question	Rating							
	High						Low	
	1	2	3	4	5	6	7	Mean
How comfortable did you feel during the interview?	3	9	21	12	14	7	1	3.89
How comfortable did you feel receiving feedback about the interview?	20	22	19	2	2	1	1	2.39
How much did you learn about yourself from receiving feedback from the patient?	7	11	22	9	14	1	3	3.27
How much did you learn about yourself from receiving feedback from the supervisor and the class? (N = 67 students who did interview only)	2	8	31	12	9	3	2	3.35
How helpful was it seeing other students conduct the interview?	26	30	24	5	1	1	1	2.25
How realistic do you think the simulated patient was?	55	23	7	1	2	1	0	1.56
How helpful was it to hear feedback from other students about the interviewing?	7	33	32	11	1	2	1	2.42
How confident do you feel now about using your interpersonal skills in clinics (N = 88 students)	3	25	45	11	3	1	0	2.57

hancing their personal development and communication skills. Follow-up studies of students, as they move into the workforce as practising Physiotherapists, is recommended to ascertain at a different level the usefulness of these approaches over time. Moreover, staff ratings of student competence might well be included in future evaluations.

Clear directives have emerged for the future development of the Communication and Interpersonal Helping Skills in Clinical Practice subject, as an outcome of the evaluation reported. The conclusions drawn bear close resemblance to those of Quirk and Letendre (1986), who evaluated a course for medical students. The use of a structured approach, videotape feedback sessions, simulated patients, and close collaboration between Behavioural Science and Physiotherapy staff are advocated as valuable adjuncts to the traditional methods used in teaching communication skills.

Acknowledgement

Tribute is paid to Jancis K. Dennis, formerly of the School of Physiotherapy, Lincoln Institute of Health Sciences, for her work in the early years of the development of the course, and to Dr. R. Kirkby, of the School of Behavioural Sciences, for his input. Details of programme content, the simulated patient component, and the bibliography are available upon request from the authors.

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